

# KGM-500

## Water-Based Epoxy Primer & Sealer Technical Data Sheet



### Description

KGM-500 is a high performance, two-part water-based epoxy coating used to prime, seal and coat concrete, masonry and fibre cement surfaces. It cures to produce a tough chemical and water-resistant coating having excellent adhesion to sound concrete. KGM-500 can be used in conjunction with solvent or water-based coatings. It can also be used on damp surfaces to speed up construction time.

### Uses

KGM-500 is used to prime and seal porous and semi-porous substrates, such as damp surfaces and newly laid concrete, over which a membrane, paint or coating is to be applied.

### Typical Areas of Application

- Internal and external wet areas
- Admix treated or plain concrete
- Timber and moisture-sensitive boards
- Moisture-resistant sheeting
- Primer for solvent or water-based membranes
- Moisture barrier on damp walls & floors

### Advantages

- Excellent adhesion to fresh concrete
- Resistant to hydrostatic pressure when cured
- Excellent oil resistance
- Adheres well to damp surfaces
- Resists hydrostatic pressure when cured
- Zero VOC's
- Non-flammable

### Design Criteria

All works must be carried out as per Australian Standards AS 4654.2: 2012 - Waterproofing Membrane Systems for Exterior Use and AS 3740: 2010 - Waterproofing of Wet Areas within Residential Buildings.

Special consideration is needed with every application of waterproofing. For applications not listed above, please contact your nearest KGM supplier for a project specific recommendation.



### Physical Properties

Form:	Liquid
Colour:	Part A: Grey when wet Part B: White when wet
Application temp range:	10 - 30°C
Volume Solids:	48%
Mixing Ratio:	1:1 by volume (Part A:Part B)
Wet film thickness:	300 micron/0.3mm per coat
Water vapour transmission:	ASTM E96 - 15g/m <sup>2</sup> 1 coat - 9g/m <sup>2</sup> 2 coats
Adhesion to concrete:	ASTM 4541 - 8N/mm <sup>2</sup>
Packaging:	20 litre kit (10 litre Part A & 10 litre Part B)
Pot life:	1-2 hours at 25°C 50% R.H.
Curing:	Re-coat: 4 hours @ 25°C 50% R.H. Full cure: 7 days @ 25°C 50% R.H.
VOC:	Zero
Clean up:	Use water or soapy water while in a wet state

### Coverage

*Used as a general Primer:*  
1 coat applied at 3m<sup>2</sup> per litre.

*Used as a Sealer on damp surfaces to allow application of subsequent membranes:*  
2 coats applied at 3m<sup>2</sup> per litre per coat.

## Application Instructions

1. **Prep work** - surfaces must be made good and should be sound, stable, dry, clean and free from contaminants such as dust, loose flaking material and substances that may diminish adhesion such as existing coatings, laitance, release agents, curing compounds and oil/grease residues. Holes, gaps, blowholes, honeycombed surfaces and non-structural cracks should be filled and made sound using a suitable non-shrink mortar. Surface voids, cracks (non-movement), pitted areas, low points, holes or deformed areas need to be repaired and filled/levelled with repair mortar or epoxy mortar repair systems to ensure the surface is made good before applying.

*Mixing:* before combining, each component should be individually well stirred. Mix equal portions of Part A and Part B thoroughly to a homogenous consistency before application. Avoid undue aeration. Only mix enough product that can be easily applied within the pot life of the product, although curing times may be effected by prevailing climate conditions.

2. **Coating** - Apply by brush, roller or spray at the recommended application/coverage rate to produce a uniform solid coating. The wet film thickness per coat should be approximately 0.3mm on average. If applying to dry concrete, cement, blockwork or Hebel, it is recommended that the surface be lightly pre-dampened with a fine water spray before application.

It should not be necessary to thin this product but alternatively the first coat may be thinned with 10% water to achieve good penetration depending on the type, density and porosity. If diluted, coverage must be increased to achieve net usage. It is not recommended to dilute the second coat. Curing times may also increase. Allow each coat to dry before applying the next.

KGM-500 must be allowed to cure for a minimum of 24 hours before applying subsequent membranes, paints, toppings, etc.

## Limitations

- KGM-500 cannot be applied over sitting water on the surface.
- KGM-500 is not a permanently trafficable membrane but is suitable for periodic service or light foot traffic.
- KGM-500 has low flexibility and is not designed to bridge live cracks or expansion joints.
- If KGM-500 is to be used in hydrostatic applications, the surface must be structurally sound and stable.
- KGM-500 is not intended for UV exposed areas and may degrade over time.
- Prior to applying KGM-500 over existing materials, we recommend performing a test patch to ensure compatibility between the products and that KGM-500 is fit for purpose.

## Tiling Recommendations

It is permissible to tile, paint or acrylic render directly over KGM-500 with covering materials capable of adhering to water-based membranes. Please contact KGM Australia for further details.

## Storage

KGM-500 can be stored unopened for 12 months, based on manufacturers batch date, in a cool, dry place below 25°C. Avoid exposure to humidity or temperatures above 50°C for extended periods. Product is sensitive to air, therefore opened containers must be used immediately. Keep out of reach of children.

## Safety

Before using or handling materials, please read all relevant Material Safety Data Sheets (MSDS) for full safety data. KGM-500 is water-based containing very low VOC's and is considered safe to use, however avoid contact with skin and eyes. Wear suitable gloves, eye/face protection and protective clothing. If on skin, remove contaminated clothing and wash skin with soap and water. If in eyes, flush with water holding eye lids open to remove product from under lids. Product is non-flammable. Good ventilation is recommended.

## Warranty

The seller warrants that at the time of shipment its products are free from manufacturing defects and, when applied in accordance with the current specification and application instructions, will perform as so stated in its product literature. Project specific warranties are available on request. Please consult your nearest distributor for further information.

## Product Disclaimer

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard. Our instructions and recommendations are only for the uses they are intended. KGM Australia does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product. We also reserve the right to update information without prior notice to reflect ongoing research and development programs. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with any relevant items.

## Technical Support

For any additional information not expressed in this document, please contact us via the details below.